Area of shapes (dissection deduction)
Criteria B practice Question

Draw three 6cm by eight 8cm rectangles on coloured card and cut them out.
Draw 1cm^2 gird for all of your three rectangles.

1) Rectangle
   a. Count the square
   b. Stick in maths journal and label

2) Right angled Triangle
   a. Take a second rectangle. Draw a line from top left to bottom right.
   b. Cut along line and deduce area of one of the triangles, linking to first rectangle
   c. Stick in maths journal and label

3) Any Triangle
   a. Tale a third rectangle. Pick any point along the top edge. Join to the bottom left and bottom right.
   b. Overlay the two cut pieces so that they fit exactly on top of the large triangle.
   c. Deduce area, again linking to first rectangle. Deduce formula for area of triangle.
   d. Stick in books and label.

After you have finished the above Question 1, 2 and 3, do the following:

4) Draw 3 more rectangles. Let the length be (l) and the width be (w). Fill in following table

Shape (rectangle)	Length (l) in cm Base (b) in cm	Width (w) in cm Height (h) in cm	Area 1 (A1) (Rectangle) cm^2	Area 2 (A2) (Triangle) cm^2
1	6	8	48	24
2				
3				
4				
n	x	y		

5) i. Describe the general rule to find area of rectangles?
   ii. Describe the general rule to find area of triangles?

6) i. Write your general rule for area of rectangles (A1) as mathematical formula in terms of l and w.
   ii. Write your general rule for area of triangles (A2) as mathematical formula in terms of b and h.

7) Give one or two more examples to justify or proof your mathematical formula are correct for both area of rectangles and triangles.

***Show detail workings in your Mathematics Journal.**